

REACTIVE PROBE CHIP, COMPOSITE SUBSTRATE
AND METHOD FOR FABRICATION OF THE SAME

ABSTRACT OF THE DISCLOSURE

5 A reaction probe chip which is prepared by loading a
reactive probe on fine pieces of carrier such as particles,
tile-like plates and then arraying and immobilizing the
reactive probe-loaded carrier on a base material. The
carrier fine pieces such as particles, tile-like plates and
the like are porous or have a reactive surface, and the
10 base material is preferably a thin inorganic plate or a
thin organic plate is disclosed.

The inorganic base material is preferably a glass
slide or silicon wafer, and the organic base material is
preferably a polyester film or polyethylene film. In case
15 the porous carrier pieces are used, the reactivity of the
inner surfaces of the porous carrier pores should be
maintained during array or immobilization process of the
reactive probe-loaded carrier.

A composite substrate characterized in that on at
20 least a section of the surface thereof, a plurality of
porous regions are orderly arranged as compartments by non-
porous regions, or a plurality of non-porous regions are
orderly arranged as compartments by porous regions is also
disclosed. The porous solid is preferably porous glass or
25 porous ceramic, the porous glass is preferably split-phase
porous glass, and the surface is preferably flattened by a
process such as polishing.

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